

**AMENDMENTS TO THE SPECIFICATION:**

Please replace paragraph 19 with the following amended paragraph:

- Q1 [19] As mentioned above, the strength of the electromagnetic force is directly proportional to the strength of the current. Figure 3 illustrates a voltage diagram of the current of Figure 2. Current I is directly proportional to the time period ( $t_{on}$ )( $T_{on}$ ) that the current is switched "on" and the total period ( $t$ )( $T_T$ ) of the square wave. While half wave switching circuits are shown, full wave rectified switching circuits are also possible to work on the full phase of current generation in the coil. Moreover, it is preferable that the frequency of current I be higher than the frequency of oscillation of magnetized plunger 10. In this way, movement of magnetized plunger 10 may be smoothly damped.